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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/847,198	05/03/2001	Deborah Ann Haitko	RD-28698	6436
6147	7590	05/07/2004	EXAMINER	
GENERAL ELECTRIC COMPANY GLOBAL RESEARCH PATENT DOCKET RM. BLDG. K1-4A59 SCHENECTADY, NY 12301-0008			COLON, GERMAN	
			ART UNIT	PAPER NUMBER
			2879	

DATE MAILED: 05/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/847,198	<b>Applicant(s)</b> HAITKO ET AL.	
	<b>Examiner</b> German Colón	<b>Art Unit</b> 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-12 and 14-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3,4,8,11,12 and 16 is/are allowed.
- 6) ☒ Claim(s) 1,2,6,7,9,10,14,15,17 and 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see Communication mailed April 05, 2004, Pages 5-7, with respect to the rejection of claim 17 over Forsdyke et al. (US 5,952,780) and the rejection of claims 1, 6, 7, 9, 14, 15, 17 and 18 over Watanabe et al. (US 5,801,483) in view of Allen et al. (US 3,858,378) have been fully considered and are persuasive. These rejections have been withdrawn.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 6, 7, 9, 10, 14, 15, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. (US 5,801,483) in view of Chvatal (US 3,755,065).

Regarding claims 1, 17 and 18, Watanabe discloses a low-pressure mercury vapor discharge lamp comprising an end metal cap (see Fig. 1) that is attached to a glass envelope with a sealing composition (see Col. 3, line 19). Watanabe is silent regarding the limitation of the sealing composition comprising a silver compound, a gold compound or combination thereof.

However, Chvatal discloses a metal-to-glass sealing composition comprising a silver compound, and teaches this composition to have a relatively low melting temperature, good wetting characteristics, and high coefficient of thermal expansion, which provides a hermetic

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seal suitable for mass production manufacturing processes, and reduces damage to high temperature sensitive articles (see Col. 1, lines 6-12, 18-23, 33-38 and 47-53). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the sealing composition disclosed by Chvatal to seal the lamp disclosed by Watanabe, with the purpose of providing a hermetic seal which is suitable for mass production manufacturing processes and which reduces damage to high temperature sensitive articles, due to its relatively low melting temperature, good wetting characteristics, and high coefficient of thermal expansion.

Regarding claim 2, Watanabe-Chvatal discloses the silver compound comprising silver oxide (see '065, col. 2, line 3).

Regarding claim 6, Watanabe-Chvatal discloses the claimed invention except for the limitation of "the silver compound being present in a range between 10-30 mg per lamp". However, it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the silver compound in an amount of 10-30 mg per lamp, since optimization of workable ranges is considered within the skill of the art. Further, the dimensions of the lamp and its production process may influence the amount of sealing composition.

Regarding claim 7, Watanabe-Chvatal discloses a lamp having a sealing composition comprising a silver compound. The Examiner notes that the recitation "elemental mercury is substantially incapable of interacting with ferric and cupric compounds to produce soluble mercury in a presence of said silver compound, gold compound or combination thereof" has not been given patentable weight because is considered an intended used recitation. It has been held

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that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations.

Referring to claims 9, 10, 14 and 15, claims 9, 10, 14 and 15 are rejected over the reasons stated in the rejection of claims 1, 2, 6 and 7, respectively.

Applicant's response necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Allowable Subject Matter***

4. Claims 3, 4, 8, 11, 12 and 16 are allowed.
5. The following is a statement of reasons for the indication of allowable subject matter:  
  
The claims are allowable for the reasons given in the Office Action mailed 08/06/2003.

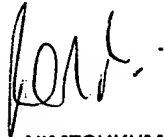
***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to German Colón whose telephone number is 571-272-2451. The examiner can normally be reached on Monday thru Thursday, from 8:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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